



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,689	03/26/2001	Byung-jo Lee	AB-1129 US	9956

7590 07/18/2003  
Westman, Champlin & Kelly, P.A.  
900 Second Avenue South  
SUITE 1600 - International Centre  
Minneapolis, MN 55402-3319

EXAMINER

SNIDER, THERESA T

ART UNIT	PAPER NUMBER
----------	--------------

1744

DATE MAILED: 07/18/2003

21

Please find below and/or attached an Office communication concerning this application or proceeding.

AS91

<b>Office Action Summary</b>	Application No. 09/818,689	Applicant(s) LEE, BYUNG-JO	
	Examiner Theresa T. Snider	Art Unit 1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 July 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 and 18-28 is/are pending in the application.
- 4a) Of the above claim(s) 21-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 18-20 and 28 is/are rejected.
- 7) ☐ Claim(s) 3-16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>19</u> | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 is dependent on a canceled claim.

Claim 20, line 3, 'at an angle of 120°' to what? It is unclear as to how the fastener can be 120° from the center of rotation.

***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-2, 17-20 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnes et al. in view of Hughes, Jones et al. and Wilson.

Barnes et al. discloses a similar apparatus however fails to disclose a driving switch, power supply means and removable member.

Barnes et al. discloses a suction assembly (fig. 1, #12).

Barnes et al. discloses a dust-collecting chamber (fig. 1, #88,86).

Barnes et al. discloses a driving portion for generating a negative pressure (fig. 3, #82).

Barnes et al. discloses a floor cloth rotatably driven in the suction assembly (fig. 9, #150,

Art Unit: 1744

col. 5, lines 10-12).

Barnes et al. discloses a rotary member for rotating the floor cloth in a plane substantially parallel to the cleaning surface (fig. 9, #22).

Barnes et al. discloses a rotary driving means (fig. 9, #44).

Hughes discloses the use of a driving switch on a handle to operate a rotary driving means that rotates parallel to a cleaning surface and a driving portion (col. 4, lines 4-6). It would have been obvious to one of ordinary skill in the art that the rotary driving means and driving portion of Barnes et al. would be controlled by a driving switch on it's handle because it is well known in the art to locate such switches on the handle, as disclosed in Barnes et al., to allow for easy access by an operator.

Jones et al. discloses an apparatus with a rotary driving member having a switch on the handle with a power supplying means connecting the switch to the driving member (col. 4, lines 11-16 and 29-32). It would have been obvious to one of ordinary skill in the art to provide the power supply means of Jones et al. in Barnes et al. in view of Hughes because it is known in the art that there would need to be an electrical connection between the switch and the driving member to allow for proper operation thereof.

With respect to claims 1 and 18, Barnes et al. discloses the floor cloth being removable (col. 5, lines 10-12). Wilson discloses a vacuum cleaner having a rotary member with a removable floor cloth attached by way of Velcro (col. 4, lines 41-52). It would have been obvious to one of ordinary skill in the art to provide the removable pad of Wilson in Barnes et al. in view of Hughes and Jones et al. to allow for ease in replacement when the pad is worn.

With respect to claim 2, Jones et al. discloses the power supply means being disposed in a

Art Unit: 1744

separate space with a protective cover for housing power terminals (figs. 1-2, #20,22).

With respect to claims 19-20, Wilson discloses the fastener disposed around the center of rotation (fig. 5, #65,64). It would have been obvious to one of ordinary skill in the art to determine the most appropriate way to mount the fasteners of Barnes et al. in view of Hughes, Jones et al. and Wilson on the rotary member to allow for the most effective attachment without accidental detachment during use of the cleaner.

With respect to claim 28, Barnes et al. discloses the floor cloth to be arranged to substantially entirely contact the cleaning surface (fig. 1).

***Allowable Subject Matter***

5. Claims 3-16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: the prior art discloses vacuum cleaners having rotary members with removable floor cloths operated by a driving means that is activated through a handle switch HOWEVER fails to disclose or fairly suggest the driving means including a bi-directional rotary motor having a pair of rotary shaft portions formed in both sides and simultaneously rotated and a power transmission unit disposed for transmitting driving force of the shaft portions to the rotary member.

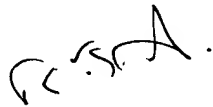
Art Unit: 1744

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (703) 305-0554.

The examiner can normally be reached on Monday-Wednesday (6:30AM-3:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on (703) 308-2920. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 879-9310 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Theresa T. Snider  
Examiner  
Art Unit 1744

TTS  
July 15, 2003